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(71) Applicant (for all designated States except US): U.S. BORAX INC. [US/US]; 26877 Tourney Road, Valencia, CA 91355-1847 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SCHUBERT, David, M. [US/US]; 26877 Tourney Road, Valencia, CA 91355-1847 (US).

(74) Agent: GANDERUP, Kurt, R.; 26877 Tourney Road, Valencia, CA 91355-1847 (US).

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(54) Title: METHOD FOR INHIBITING THE CRYSTALLIZATION OF BORIC ACID

(57) Abstract: A method for inhibiting the crystallization of boric acid is provided. Boric acid is dissolved in water and a vitrifying agent, such as an amino alcohol or amino acid, to form an aqueous mixture which is then dried to form a vitreous boric acid-containing residue. This mixture, when applied to a surface and allowed to dry on the surface, forms a vitreous boric acid-containing coating which is readily adherent to the surface, or if allowed to penetrate into a porous substrate, deposits a vitreous boric acid-containing residue within the substrate upon drying. The vitreous boric acid-containing residue provides beneficial properties, including for example improved fire retardancy and biocidal protection, to a variety of materials such as cotton batting, cellulose, and wood and paper products and gypsum wallboard.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/09931

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A01N 59/14(2006.01);D06M 11/00(2006.01)

USPC: 424/659,660,657;8/116.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/659, 660, 657; 8/116.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, NPL (SCIRUS), WIPO, EPO, PALM.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,928,672 A (HAMMONS et al) 27 July 1999 (27.07.1999), entire document especially abstract, col. 1-3.	1-11, 21-23
X	US 6,488,718 B1 (REARICK) 3 December 2002 (03.12.2002), entire document especially abstract and col. 4-7.	12-15
X	US 6,123,756 A (POPPEN et al) 26 September 2000 (26.09.2000), entire document especially abstract and col. 1-4.	16-20

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Mina Haghighatian

Telephone No. 571-272-0600